

CLAIMS

What is claim is:

- 5 1. A lighting module of a keyboard, said lighting module comprising:
at least one light source;
a light guide having a light-scattering surface, said light source
locating on a first side of said light guide and said light-scattering
surface scattering light beams from said light source; and
10 a reflector disposing under said light guide, said reflector
reflecting said light beams from said light-scattering surface to
illuminate a keyboard .
2. The lighting module of a keyboard according to claim 1 further
15 comprising a second light source located on a second side of said light
guide opposite to said first side of said light guide.
3. The lighting module of a keyboard according to claim 1, wherein said
light source comprises light-emitting diodes.
- 20 4. The lighting module of a keyboard according to claim 1, wherein said
light guide has a thickness which decreases linearly from said first side
of said light guide.
- 25 5. The lighting module of a keyboard according to claim 1, wherein said
light-scattering surface has a plurality of light-scattering protrusions.
6. The lighting module of a keyboard according to claim 5, wherein said
light-scattering protrusions have a shape of hemisphere.

7. The lighting module of a keyboard according to claim 5, wherein said light-scattering protrusions have a shape of cube.

5 8. The lighting module of a keyboard according to claim 5, wherein said light-scattering protrusions are formed by printing.

9. The lighting module of a keyboard according to claim 5, wherein said light-scattering protrusions are formed by injection molding.

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10. The lighting module of a keyboard according to claim 1, wherein said light guide has a thickness which decreases linearly from said first side of said light guide, and said light-scattering surface has a plurality of light-scattering protrusions having a density decreasing from said first
15 side of said light guide.

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11. The lighting module of a keyboard according to claim 1 further comprising a second light source located on a second side of said light guide opposite to said first side of said light guide, and said light guide has a constant thickness, and said light-scattering surface has a plurality of light-scattering protrusions having a constant density.

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12. The lighting module of a keyboard according to claim 1, wherein said light guide are made of poly(methyl methacrylate, PMMA).

13. The lighting module of a keyboard according to claim 1 further comprising a control circuit for controlling said light source.

14. A lighting module of a keyboard, said lighting module comprising:
a light source;

a light guide having a light-scattering surface and a thickness which decreases linearly from a first side of said light guide, said light source locating on said first side of said light guide and said light-scattering surface comprising a plurality of light-scattering protrusions having a density decreasing from said first side of said light guide to scatter light beams from said light source;

and a reflector disposing under said light guide, said reflector reflecting said light beams from said light-scattering surface to illuminate a keyboard .

15. A lighting keyboard, said lighting keyboard comprising:

a keyboard; and

a lighting module disposed under said keyboard comprising:

at least one light source;

a light guide having a light-scattering surface, said light source locating on a first side of said light guide and said light-scattering surface scattering light beams from said light source; and

a reflector disposing under said light guide, said reflector reflecting said light beams from said light-scattering surface to illuminate said keyboard .

16. The lighting keyboard according to claim 15, wherein said keyboard comprises a keyboard of a notebook personal computer.

17. The lighting keyboard according to claim 15, wherein said keyboard comprises an independent keyboard used in desktop personal

computers.

18. The lighting keyboard according to claim 15 further comprising a second light source located on a second side of said light guide opposite
5 to said first side of said light guide.

19. The lighting keyboard according to claim 15, wherein said light source comprises light-emitting diodes.

10 20. The lighting keyboard according to claim 15, wherein said light guide has a thickness which decreases linearly from said first side of said light guide.

15 21. The lighting keyboard according to claim 15, wherein said light-scattering surface has a plurality of light-scattering protrusions.

22. The lighting keyboard according to claim 21, wherein said light-scattering protrusions have a shape of hemisphere.

20 23. The lighting keyboard according to claim 21, wherein said light-scattering protrusions have a shape of cube.

25 24. The lighting keyboard according to claim 15, wherein said light guide has a thickness which decreases linearly from said first side of said light guide, and said light-scattering surface has a plurality of light-scattering protrusions having a density decreasing from said first side of said light guide.

25. The lighting keyboard according to claim 15 further comprising a second light source located on a second side of said light guide opposite to said first side of said light guide, and said light guide has a constant thickness, and said light-scattering surface has a plurality of light-scattering protrusions having a constant density.

26. The lighting keyboard according to claim 15, wherein said light guide are made of poly(methyl methacrylate, PMMA).

27. The lighting keyboard according to claim 15 further comprising a control circuit for controlling said light source.